

Support For  
**sinclair**

ZX81 - spectrum - QL

and

**TIMEX sinclair**

1000 - 1500 - 2068

computers

# **TIMELINEZ**

VOLUME 5

ISSUE 6

JUNE 1987

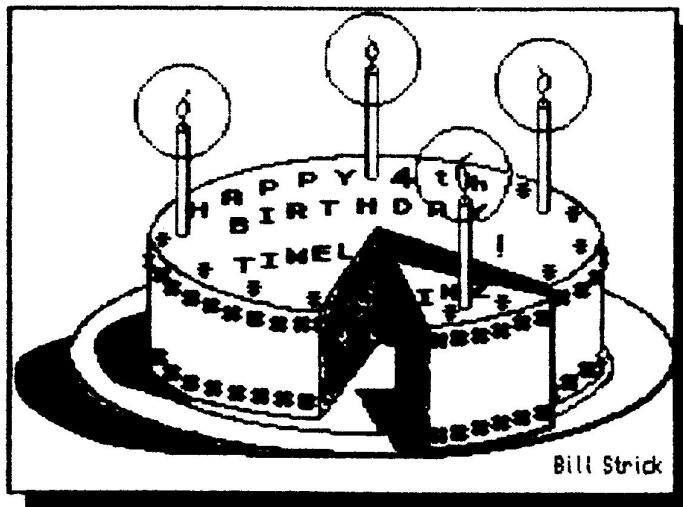
\$1.00

THE JOINT NEWSLETTER OF THE THREE TIMEX-SINCLAIR  
USER GROUPS IN THE SAN FRANCISCO BAY AREA

**\*\*EBZUG\*\***

**\*\*PUC\*\***

**\*\*SUSTUC\*\***



## OVER 600 T/S ENTHUSIASTS JAM FEST '87 AT INDY

### Pete Fischer's report:

I think it might be easier to write about impressions of a Cyclone or impressions of an earthquake.

A spectacular event took place in Indianapolis on May 2-3. The 1987 T/S FEST had easily twice the people and 4-5 times the excitement and activity.

To kick things off, Friday evening's dinner was something like a dream, as one by one 112 of the T/S Master Programmers, Vendors, User Group representatives and general folk all stood up and introduced themselves.

There was Tom Woods, Tom Bent, Jeff Moore, Stan Lemke, Dave Woods of Siriusware, Rod Gowen, Tim Woods of TIME DESIGNS, Rob Curry, Joe Newmann, John Coffey, David Ridge, Kurt Casby, Joe Williamson, Duncan Teague, Basil Wentworth and the list goes on and on...

It was evident that quite a "Meeting of the Minds" was about to take place, and no one left disappointed. Many conversations went on into the morning hours, as some visitors relinquished the idea of sleep in order to make time to talk to folks they might never see again.

Another major feature was the products. With over 55 vendors in attendance, one of the most exciting elements of the whole weekend were the "GOODIES"...At last a person got to see and DEMO all the fantastic hardware and software they've heard about for YEARS; and what's more, the author/designer was right there to answer questions! It was not to be believed! And as might be expected, there were some items there for FANTASTIC PRICES, such as 64K rampacs for \$25 and QLs w/software for \$99! Plus a truly amazing "T/S Swapmeet" with sellers from around the country. Many new products were released, an EXPERT SYSTEM from Novelsoft,

## WE'RE FOUR YEARS OLD!

This birthday issue of TIME-LINEZ marks the end of our newsletter contest. All articles sent to us within the last year have been liberally awarded points on a 1-3 scale by George Mockridge.

One of the qualifying contributors will win a brand-new QL computer or a \$150 gift certificate.

Join us for the prize drawing at Sunset Electronics, on Saturday, June 27th at 1:00 P.M.

GOOD LUCK!

XXXXXXXXXXXXXXXXXXXXXX

A QL Book published by TIME DESIGNS, Amstraad had their new PC there, but sadly failed to bring any SPECTRUM 128's or other Spectrum products.(I have to say, the poor guy looked a bit "neglected" as people rushed past him.)

But the biggest thing about the Fest was PEOPLE. After nearly 2 years of exchange (electronic and paper), I FINALLY got to meet Ed Grey- the man's as big as a mountain! Also among my biggest moments was shaking hands with John Olinger and also Kurt Casby. No one EVER turns out to look as you imagined them...But I also met a LOT of fine Sinclair fanatics that I never heard of before. These folks were ALSO a pleasure to meet. The only real problem with all this, of course, was that there was simply not enough time to talk with any one person reasonably. I hope that the people I met will become friends during the next year and we can exchange letters and keep the spirit alive!

There were also 12 User Groups who were dedicated enough to forego the shopping and seminars and set up tables. But many other groups were represented (no one knows how many for sure) from Florida to Vancouver, from San Diego to New York.

(Please turn the page.)

## Inside This Issue:

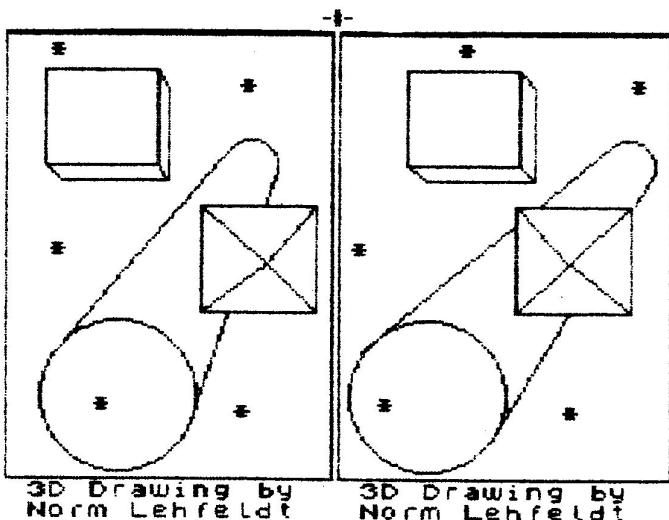
Tim Swenson shows QL owners how to keep their secrets secret.

## FEST '87 (continued)

There were also more than 115 door prizes awarded plus six separate drawings, as donated by the vendors. Some of the prizes had to be given away more than once as their first winners failed to claim them.

Sadly, I completely missed the many seminars as I had responsibilities of my own at a table. But several groups had video cameras there and taped them all. Hypothetically, these will be passed around to the User Groups who missed the FEST altogether.

My hat goes off to Paul Holmgren, Frank Davis, Willie Jones and the other members of the FEST committee. I feel the whole T/S Community owes them a great THANKS for such fine organization, and generally putting on one FINE show!



Here is a true 3-dimensional drawing. It can be viewed by most people without any kind of optical aid. Bring the page close enough to your eyes so that each eye sees only one of the drawings. Try to relax your eye muscles so that the two images fuse into one. You should be able to see the various objects in the picture at different distances from the paper.

I will bring a larger, colored version of the drawing to the June 21 PUG meeting, along with a viewer that will make it easy for anyone to see the 3-dimensional effect.

This drawing (done on a 2068 with Artworx) has been posted on CompuServe as an RLE graphic.

I believe many interesting 3-D effects are possible with this system.

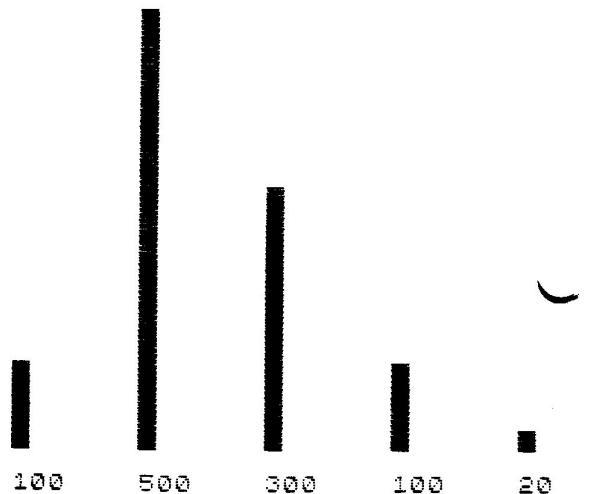
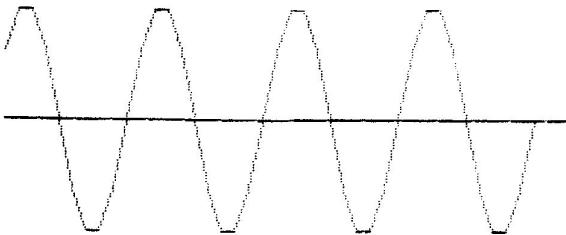
Why not give it a try?

Here is another of my unsophisticated programs. It (oh gosh that's unsophisticated) (at 73 you don't do over) DOES do two different types of graphs, as shown, though and I don't think I have seen that before. MAC

```

900 REM GRAPHS..R.J.MCMAHAN POB
753 HAYDEN ID 83835
910 INPUT "NUMBER OF ITEMS ";Q
920 DIM X(Q): DIM Y(Q)
930 LET D=0: LET F=1000
935 INPUT "FOR AN EQUATION, 1"
FOR ENTERING THE DATA, 2";Z
937 GO TO 940: (Z=1)+948: (Z=2)
940 FOR N=1 TO Q
945 LET Y(N)=10*SIN ((N/Q)*8*PI
)
946 GO TO 960
948 FOR N=1 TO Q
950 INPUT "ENTER Y ";Y(N)
955 IF F>Y(N) THEN LET F=Y(N)
965 IF D>Y(N) THEN LET D=Y(N)
970 LET X(N)=N*30/Q: PRINT X(N)
,Y(N)
980 NEXT N
990 PRINT "LOW ";F,"HIGH ";D
995 PAUSE 100: CLS
1000 FOR P=1 TO Q
1010 IF F<0 THEN GO TO 1070
1020 FOR M=1 TO Y(P)*18/(D)
1030 PRINT AT 20-M, (P+(P-1)*INT
(30/Q)+.5);■
1035 PRINT AT 21, (P+(P-1)*INT
(3
0/Q)+.5);Y(P)
1040 NEXT M
1045 NEXT P
1050 STOP
1070 PLOT 0,.87
1080 DRAW 850,0
1100 LET R=INT ((250/Q)+.5): LB
S=INT ((10*40/(D))+.5)/10
1110 LET A1=Y(P)*S+.87
1120 PLOT (P+R)-850/0,A1
1125 LET B1=((((P+1)-P)*R): LET C
1=(Y(P+1)-Y(P))*S
1130 DRAW B1,C1
1135 IF P>=Q-1 THEN STOP
1140 NEXT P

```



## EBZUG NEWS

BY FRED TEMPLETON

## REPORT ON MEETING OF MAY 28, 1987

16 members and guests attended the meeting which was held at the TEMESCAL Branch of the Oakland Library, where our next meeting is planned to be held on Thursday June 25th. The address is: 5205 Telegraph Avenue (at 51st) enter from back door. The present plan for our July meeting is to invite ourselves to another PUG meeting Sunday July 19th due to the fact that we can only use the Temescal Library for three consecutive months.

Darwin Thompson gave a report on the 1987 Midwest TIMEX Computer Fest. The two day event was attended by approximately 800 people from all over the country. Many of the TIMEX support suppliers had booths and had there stuff for sale. A lot of the good stuff was sold out Saturday morning. On Sunday there was a lot a discounting, with the QL computer selling at one booth for \$99. Darwin purchased some software he needed and lots of souvenirs including: a TIMEX COMPUTER FEST T-Shirt, a TIMEX hat, and at least 6 TIMEX pins that he had attached to the hat. He also displayed photos he had taken of the event.

Pat Morrissey brought us up to date with the LogOn Unlimited Bulletin Board System which he is the TIMEX/Sinclair SIG OP. Located in San Mateo, call (415) 571-6911 [word 8, stop 1, No Parity] to log on to LogOn. He reports that there are many TIMEX programs that we can transferred to our own computers to use. He invited everyone to give it a try, there is no fee for using the system, but a \$25.00 per year donation is requested.

## PUG NEWS

by Walt Gaby

THE MAY 17 MEETING OF PUG WAS HIGHLIGHTED BY PRESENTATIONS FROM THREE MEMBERS:

FIRST, NORM LEHFELDT, THE NEW EDITOR OF TIMELINEZ, REPORTED ON THE USE OF FRONT PAGE (A QL DESK-TOP PUBLISHING PROGRAM) FOR THE PREPARATION OF OUR NEWSLETTER.

THEN, TIM SWENSON MADE A PRESENTATION OF HIS PASCAL-COMPILED PROGRAM ON CELLULAR AUTOMATA, USING THE QL.

THIRD, BOB ORRFELT OUTLINED SOME NEW INFORMATION ON THE POTENTIAL FOR BANK-SWITCHING ON THE T/S 2068.

## OTHER ITEMS REPORTED:

GEORGE MOCKRIDGE ANNOUNCED THAT THE JUNE ISSUE (THIS ONE) OF THE NEWSLETTER IS THE LAST ISSUE FOR THE CONTRIBUTOR CONTEST.

WALTER JOHNSON PROMISED AN ARTICLE REGARDING AN RGB MONITOR CONNECTION...TO BE ACCCOMPANIED BY A DIAGRAM USING TECHDRAW.

STUART REE REPORTED THAT HIS COLLECTION OF ENGLISH GAMES IS NOW OVER 400 IN NUMBER. WELL, REELY!

ALERT FOR 1000 AND 1500 USERS! SEE GEORGE MOCKRIDGE REGARDING NEW SOFTWARE CATALOG FROM SILICON MOUNTAIN.

ATTENTION: VOLUNTEERS NEEDED TO SERVE ON A COMMITTEE TO PLAN A SINCLAIRE FAIRE!

NEXT MEETING DATE: JUNE 21.

## 'QL-CRYPT' FILE ENCODER

By Tim Swenson

This program encrypts (encodes) an ASCII file and converts it back. Once the file has been encrypted, it is almost impossible for anyone to convert it back with out the password that was used to encrypt it.

I first saw this program on an IBM PC/XT. The program came with some documentation explaining how the program worked. A while back I remembered the program and figured I'd give it a try on the QL.

Basically what the program does is this: It first takes the password that you entered and converts it to a single integer. This number is used as a seed to the random number table. The seed tells the computer where to start on the random number table.

Now a character is read from the file. A random number between 1 and 4 is generated, added to the ASCII value of the character, and then outputed to the output file. This is repeated until all of the file is encrypted.

Now the random number table is basically a long list of pseudo-random numbers. The seed points to a start place in the table. Once at this start place, the generator just reads off the numbers as it goes down the table. So with the same seed one can get the same random numbers in the same order.

This is what is used to decode the file, except that a random number between 1 and 4 is subtracted from the character, thus giving us the original character.

## 'QL-CRYPT' Listing

```
100 WINDOW #1,512,256,0,0
110 PAPER 0 : INK 4: CLS
120 CSIZE 3,1
130 PRINT \\
140 PRINT "           QL-CRYPT"
150 CSIZE 0,0
160 PRINT
170 PRINT "
An Encoding and Decoding
Utility"
180 AT 21,25: PRINT "by Timothy
Swenson"
190 AT 13,8: INPUT "   Input
Password : ";password$
200 LET length = LEN(password$)
210 LET pass = 0
220 FOR x = 1 TO length
230 LET pass = pass +
CODE(password$(x))
240 NEXT x
250 LET pass = INT(pass/length)
260 RANDOMISE pass
270 CLS
280 AT 5,2
290 CSIZE 3,1
300 PRINT "  M A I N  M E N U "
310 PRINT "
-----"\\
320 CSIZE 0,0
330 PRINT "           1)
List Instructions"\\
340 PRINT "           2)
Encode a file"\\
350 PRINT "           3)
Decode a File"\\
360 PRINT "           4)
Quit program"\\\\\\
370 INPUT "           Enter
your choice : ";choice
380 IF choice = 1 THEN
instructions
390 IF choice = 2 THEN encrypt
400 IF choice = 3 THEN decrypt
410 IF choice <> 4 THEN GO TO
270
420 DEFine PROCedure encrypt
430 CLS : RANDOMISE pass
440 AT 7,3: PRINT "Please enter
file to encode."
450 INPUT infile$
460 AT 10,3: PRINT "Please enter
output file."
470 INPUT outfile$
480 OPEN_IN #5,infile$
490 OPEN_NEW #6, outfile$
```

## 'QL-CRYPT' Listing (continued)

```

500 CLS : PRINT\\
510 PRINT " Current line working
on :"
520 LET inline = 0
530 REPeat loop
540 IF EOF(#5) THEN EXIT loop
550 INPUT #5, in$
560 LET inline = inline + 1
570 AT 4,5: PRINT inline
580 LET length= LEN(in$)
590 FOR x = 1 TO length
600 LET rand = RND(1 TO 4)
610 LET out =
CODE(in$(x))+rand
620 PRINT #6,CHR$(out);
630 END FOR x
640 PRINT #6
650 END REPeat loop
660 CLOSE #5 : CLOSE #6
670 END DEFine decrypt
680 DEFine PROCedure decrypt
690 CLS : RANDOMISE pass
700 AT 7,3: PRINT "Please enter
file to decode."
710 INPUT infile$
720 AT 10,3: PRINT "Please enter
output file."
730 INPUT outfile$
740 OPEN IN #5,infile$
750 OPEN NEW #6,outfile$
760 CLS : PRINT\\
770 PRINT " Current line working
on :"
780 LET inline = 0
790 REPeat loop2
800 IF EOF(#5) THEN EXIT loop2
810 INPUT #5, in$
820 LET inline = inline + 1
830 AT 4,5: PRINT inline
840 LET length= LEN(in$)
850 FOR x = 1 TO length
860 LET rand = RND(1 TO 4)
870 LET out =
CODE(in$(x))-rand
880 PRINT #6,CHR$(out);
890 END FOR x
900 PRINT #6
910 END REPeat loop2
920 CLOSE #5 : CLOSE #6
930 END DEFine decrypt
940 DEFine PROCedure
instructions
950 CLS
960 AT 2,0

```

970 PRINT " This program  
will encode a Sinclair ASCII  
file such that it can"  
980 PRINT "not be decoded by  
this program, or any program,  
with out the same "  
990 PRINT "password that was  
used to encode it."  
1000 PRINT " Sinclair ASCII  
is any character code that can  
be printed to the "  
1010 PRINT "screen. This  
includes international  
characters. Machine code and "  
1020 PRINT "other like files can  
not be used."  
1030 PRINT " The file format  
will stay the save. That is all  
spacing and number"  
1040 PRINT "of characters per  
line will be the same as the  
input file"  
1050 PRINT " Hit any key to  
go on "  
1060 IF INKEY\$="" THEN GO TO  
1060
1070 END DEFine instructions

# # #

## NOTICE

To Our Contributors:

The next issue of

## T I M E L I N E Z

will be a two-month, vacation  
issue. Please keep in mind  
the next TWO copy deadlines:

Monday, July 6th

and

Monday, September 7th

# Sinclink

## 2. GUTS/SV meeting news:

2.1 870527 at 'Star by the Sea' Catholic Church in Alviso.

Meeting Attendees:

- \* Steve Nichols demonstrated the following programs (which he wrote) for the TS1000:
- \* (SM87528-) Mail List
- \* (SR87528-) Speeds & Ratios, A program to compute different drive train speeds and ratios with a conversion sub program.
- \* (SC87528-) Cavity Cutter Version 4, This program figures dial readings on a milling machine for any cutter size and cavity size.
- \* (SC87528A) Cavity Cutter Version 3
- \* (SC87528B) Cavity Cutter Version 1

Steve has contributed all these programs to our software library. They have been copied to A&J Microdrive Wafer Number 830822 for viewing and copying at meetings. If you wish to view these at meetings please call Bill Miller so we can make arrangements to bring the equipment.

\* Mark Wahl reports he plans two articles for TIMELINEZ/Sinclink:

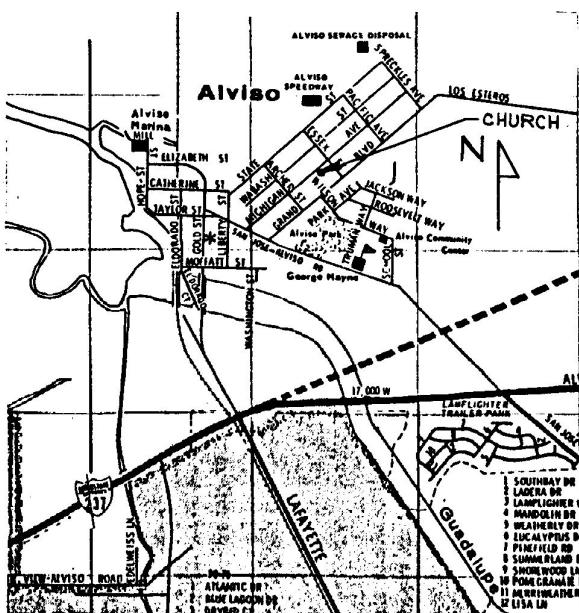
- \* A CMOS Static RAM bankswitching design for the TS1000. (16K BYTES to 256 MB).
- \* TS1000/TS2068 X-MODEM communications program.
- \* Terry Greenlee demonstrated using his TS1500 & TS2050 MODEM as a terminal to control his MS-DOS Toshiba 1100+ thru an Avatek 300/1200 BPS MODEM.
- \* Bill Phillips is plugging ahead with the SLIX SORT and WRITE? functions and he hopes to have the code written and tested? by the next meeting.
- \* Keith Felix promises to write a TIMELINEZ/Sinclink article about his TS1000 voice recognition/relay board project.
- \* Oliver Chaplin renewed his TIMELINEZ/Sinclink subscription. Thanks Oliver.
- \* Bill Miller demonstrated the TS2068 DLAN 'User Group Advertisement' for use at computer shows.

## 2.2 870530 Stanford Meeting

\* Donal McRae; 408-738-2931 is looking for help to convert two Z1 Spectrum knitting programs to his Macintosh. Both programs will probably run on a TS2068 but one is so large (40317 BYTES) that it won't fit in a TS2068. Can anyone help?

What Don probably really needs is a TS2068 with Spectrum ROM. Does anyone have one for sale?

Thanks to Don for distributing about (20) TIMELINEZ 8705 at the 870530 Computer Swap America swap meet at the Santa Clara County Fairgrounds.



FROM THE APRIL 1987 PLOTTER N/L  
OF CLACKMAS COUNTY, OREGON

## PATCH FOR \*D & \*E COMPIILATION BUG

## TIMEMACHINE Users:

It has come to our attention that there is a small bug in the version of TIMEMACHINE which you have. Most users will not even be aware of this bug because it is rather obscure. You will only encounter this bug when you are compiling very large programs and are forced to use \*D & \*E to compile the data statements separately. Please follow the instructions below to correct your copy of TIMEMACHINE.

After the program has loaded (while the backup prompt is still on the screen), break into the program by deleting the left quote and entering STOP (SYMBOL SHIFT A).

Add the following lines to Basic:

## SPECTRUM VERSION

```

20 FOR i=1 TO 4
21 READ address, n
22 FOR j = 0 TO n-1
23 READ byte: POKE address+j, byte
24 NEXT j
25 NEXT i
100 DATA 23952,4
101 DATA 205,240,133,0
102 DATA 29145,4
103 DATA 205,240,133,0
104 DATA 29906,4
105 DATA 205,247,92,0
106 DATA 34288,12
107 DATA 17,0,0,205,247,92,192,237,
91,241,68,201

```

## TS 2068 VERSION

Lines 20 to 25 same as Spectrum.

```

100 DATA 26834,4
101 DATA 205,0,130,0
102 DATA 32070,4
103 DATA 205,0,130,0
104 DATA 32858,4
105 DATA 205,71,104,0
106 DATA 33280,12
107 DATA 17,0,0,205,71,104,192,237,
91,241,68,201

```

Now, type GOTO 8000 and ENTER to make a new backup copy

**JUNE:**

- 21 Peninsula Users Group  
1 P.M. Peninsula Hosp.
- 24 Silicon Valley Group  
7 P.M. Star Of The Sea  
Catholic Church, Alviso
- 25 East Bay Group  
7 P.M. Temescal Branch  
Oakland Public Library

**July:**

- 19 Joint Meeting of all three Bay Area Groups.  
1 P.M. Peninsula Hospital

**August:**

- 16 Peninsula Users Group  
1 P.M. Peninsula Hospital
- 26 Silicon Valley Group  
7 P.M. Star Of The Sea  
Catholic Church, Alviso

Note: August meeting of the East Bay group was not set at press time.  
Please call one of the officers for latest information.

**Every Saturday Morning**

The Timex/Sinclair Special Interest Group of the Computer Workshop meets in room 300C of Jordan Hall on the quadrangle at Stanford U. 9:00 A.M.

XXXXXXXXXXXXXXXXXXXX

**Support Your Local  
Timex/Sinclair Users Group!**

**EBZUG** EAST BAY ZUG USER GROUP  
3128 KING STREET  
BERKELEY, CALIFORNIA 94703  
(Woody McPheeter's)

**CONTACT:** ROSS ENGLISH (415) 465-3116  
**MEETINGS:** FOURTH THURSDAY OF EACH MONTH, 7:30 P.M.  
WEST BRANCH LIBRARY  
1125 UNIVERSITY AVENUE, BERKELEY

MAKE CHECKS FOR DUES PAYABLE TO "WOODY MCPHEETERS".

**PUG** PENINSULA USER GROUP  
311 MICHELLE LANE  
DALY CITY, CALIFORNIA 94015  
(415) 878-1773

**PRESIDENT:** GEORGE ROCKRIDGE  
**MEETINGS:** THIRD SUNDAY OF EACH MONTH, 1:00 P.M.  
PENINSULA HOSPITAL  
1703 EL CAMINO REAL, BURLINGAME

**MAIL DUES TO:** PAT MORISSEY  
2000 CRYSTAL SPRINGS ROAD  
BUILDING 21, UNIT 22  
SAN BRUNO, CALIFORNIA 94066

**SYSTIG** SILICON VALLEY SINCLAIR TECHNOLOGY  
USER GROUP

6675 CLIFFORD DRIVE  
CUPERTINO, CALIFORNIA 95014  
(415) 253-3175

**PRESIDENT:** RITA CARR, (415) 738-2888, X-4579  
**MEETINGS:** LAST TUESDAY OF EACH MONTH, 7:00 P.M.  
(FOR LOCATION OF MEETINGS SEE ACCOMPANYING  
SYSTIG NEWS.)

MAKE CHECK FOR DUES PAYABLE TO "SYNKLIN".

THIS TIMELINEZ NEWSLETTER IS A JOINT PUBLICATION OF THE THREE TIMEX-SINCLAIR USER GROUPS IN THE S.F. BAY AREA.

NEW MEMBERS AND VISITORS ARE ALWAYS WELCOME!

FOR FULL MEMBERSHIP (INCLUDING PARTICIPATION IN GROUP MEETINGS, THE NEWSLETTER, PROGRAM LIBRARY PRIVILEGES AND SPECIAL EVENTS) SEND \$15 ANNUAL DUES TO ONE OF THE ABOVE ADDRESSES WITH THE CHECK PAYABLE AS INDICATED.

READERS OUTSIDE THE SAN FRANCISCO BAY AREA MAY SUBSCRIBE TO THE NEWSLETTER ONLY BY SENDING A CHECK FOR \$10 TO ONE OF THE ABOVE GROUPS.

Pete Fischer and Steve Ishii have released the long-awaited version 2.0 of the 'Guide To Timex/Sinclair Telecommunications.' It is certainly worth waiting for. (I suppose it is honorable to declare my interest here -- I contributed a couple of short programs to the book and did a little work on the cover.)

The new volume is 96 8 1/2" by 11" pages. For those forced to squint at the reduced size type in the earlier version, the new size is a major improvement. But it is not the only one.

The book includes descriptions of all of the hardware and software currently available for all of the Timex and Sinclair machines. Sources are given for most items. There are modifications listed for some of the software and fixes for bugs that have been discovered.

There is a listing of Timex/Sinclair files on every BBS and commercial system that has such files that is said to be about 90% complete at the time of publication.

Those of us who have gotten heavily into communication with our computers find it so rewarding that we can't understand the reluctance of some of you to get involved. If you are in that category, this book should encourage you to test the water. It includes reproductions of screen displays and describes operating procedures for all of the BBS's and systems discussed. This should

make it fairly painless for you who have not yet discovered how much pleasure and information one can get from computer telecommunication to do so.

Because the book is so large, Pete and Steve have been forced to increase the price to \$7.50, postage included. The book is well worth it. You should order from:

Pete Fischer  
P.O. Box 2002  
Tempe, AZ 85281

A new Graphics Interchange Format (GIF) has lurched out of the clutches of CompuServe.

It is described by the company as supporting the exchange of images as big as 16,000 dots on a side in up to 256 colors simultaneously. The colors can be defined from a possible set of 16,000,000 colors. Images of photographic quality are said to be possible with the system.

I mentioned that it has 'lurched out of the clutches' of CompuServe because so far the company has released only a few off-line decoders for the most popular machines. Talk on the system is of the bugs being found in these programs and of CompuServe's refusal so far to make adequate documentation available for those who wish to write encoder/decoders for us orphans.

Don Thompson is anxious to write a decoder for the QL as soon as we can pry the info out of CIS.

NHL

Managing Editor: Norm Leffeldt  
Editors:

EDZUG: John Ezike  
PUG: George Rockridge  
SUSTUG: Bill Miller

Advertising:

PUG: Norm Leffeldt  
EDZUG: Bill Strick

N/L Exchange: Rita Carr

Advertising Schedule:

Full Page:	\$40.00
Half Page:	\$25.00
1/4 Page:	\$15.00
1/8 Page:	\$10.00

Published monthly by the Timex/Sinclair User Groups in the San Francisco-Oakland-San Jose area. Sent to all current members.  
\$15.00 annual dues.

## TIMELINEZ

P.O. Box 1312  
Pacifica, CA 94044  
U.S.A.

First Class Mail